

- 9. A near field optical apparatus, comprising:
  - (a) a light source;
- (b) a conductive plane proximate to said light source, said conductive plane having an aperture therein positioned such that light from said light source passes through said aperture;
- (c) said conductive plane including at least one protrusion which extends into said aperture, wherein said protrusion extending into said aperture forms an aperture shape that produces very high light throughput.

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17. The near field optical apparatus of claim 9, wherein said light source is a semiconductor laser, and said conductive plane is a metal layer proximate to an emission facet of said semiconductor laser.

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- 19. A semiconductor laser apparatus comprising an emission facet having a conductive surface, said conductive surface having an aperture therein, said conductive surface including at least one protrusion extending into said aperture, said at least one protrusion and said aperture configured to produce a transmission mode with very high throughput.
- 20. A near field optical apparatus comprising a conductive plane having an aperture therein, said aperture including a plurality of spaced apart slots, and at least one connector region joined to each adjacent said spaced apart slot.